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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,685	12/14/2005	Narendranath Airody Udupa	NL 030709	8566
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EXAMINER ARCHER, CHRISTOPHER B				
ART UNIT 4148		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/560,685

Applicant(s)

AIRODY UDUPA ET AL.

Examiner

CHRISTOPHER B. ARCHER

Art Unit

4148

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The instant application having Application No. 10/560,685 filed on 12/14/2005 is presented for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63**.

Priority

3. As required by **M.P.E.P. 201.14(c)**, acknowledgement is made of applicant's claim for priority based on applications filed on June 13, 2003 (EPO 03101791.6).

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Examiner Notes

4. Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Drawings

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 200. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the "random hysteresis" and "random don't care" subject matter in full detail (page 8, line 10 to page 9, line 11) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being

amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "third field" from claim 11, 13, and 14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.

- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 14 recites the limitation "the third field" in line 2. There is insufficient antecedent basis for this limitation in the claim.

The "third field" was introduced in claim 11; therefore, for the purposes of examination, the examiner interpreted the claim as: "A method according to claim 6 11, comprising retaining the contents of the third field."

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 2, 4, 6, 9, 10, 15, and 16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Anderson (US Patent No. 5,751,812).

Regarding claim 1:

Anderson discloses "A method of authenticating a password that is presentable in a series of instances and has a first set of fields (201, 203) and has a second field (113, 114, 202, 311, 313, 314), wherein the first set of fields comprises at least one of (a) a static field (105, 201 or 302) that does not change upon each instance of the password and (b) a dynamic field (101, 102, 203, 305 or 306) that changes with each instance of the password based upon extrinsic data, and wherein the second field is arranged to contain historic data that is a function of a preceding instance of authentication, the method comprising:

receiving a current presented instance of the password (110 or 310); and
performing a comparison operation (605) in which the second field (113, 114, 311, 313 or 314) of the current presented instance of the password is compared using data retained since a prior instance of authentication of the password," as

[(Anderson column 3, lines 43 - 47 and Fig 4) shows a password that contains a static "pass phrase" field and a dynamic "seed" field.]

(Anderson column 5, line 35 – column 6 line 49 and Figs 3, 4) shows a re-initialization process that sends two passwords, both containing the same pass phrase. The first password contains a seed that was used in the previous login attempt and the second password contains the new value to be stored in the server. The server then compares the first password to the one stored from a previous login.]

Regarding claim 2:

Anderson discloses "A method according to claim 1, wherein the historic data is a function of a preceding password," as

[(Anderson column 3, lines 43 - 47 and Fig 4) shows a password that contains a static "pass phrase" field and a dynamic "seed" field.]

Regarding claim 4:

Anderson discloses "A method according to claim 1, wherein the first set of fields comprises a static field (201) and a dynamic field (203)," as

[(Anderson column 3, lines 43 - 47 and Fig 4) shows a password that contains a static "pass phrase" field and a dynamic "seed" field.]

Regarding claim 6:

Anderson discloses "A method according to claim 1, further comprising, upon successful comparison, retaining data for purposes of comparison of a next instance of the password," as

[(Anderson column 5, line 65 – column 6 line 49) shows the system authenticating the old password and storing the new one on a successful comparison.]

Regarding claim 9:

Anderson discloses "A method according to claim 6, wherein the data retained comprises at least a part of the current presented instance of the password," as

[(Anderson column 5, line 65 – column 6 line 49) shows the system authenticating the old password and storing the new one on a successful comparison.]

Regarding claim 10:

Anderson discloses "A method according to claim 1, wherein the step of comparing comprises:

generating (604) at least the second field of a generated instance of the password; and

comparing (605) the second field of the current presented instance of the password with the second field of the generated instance of the password," as

[(Anderson column 3, lines 43 - 47 and Fig 4) shows a password that contains a static "pass phrase" field and a dynamic "seed" field.

(Anderson column 5, line 35 – 58) shows a password being compared to a previous password. Because both passwords will have the same "pass phrase," only the "seed" will distinguish between them.]

Regarding claim 15:

Anderson discloses "Apparatus for receiving and authenticating a password that is presentable in a series of instances and has a first set of fields (201, 203) and has a second field (202), wherein the first set of fields comprises at least one of (a) a static field (201) that does not change upon each instance of the password and (b) a dynamic field (203) that changes with each instance of the password based upon extrinsic data, and wherein the second field (202) is arranged to contain historic data that is a function of a preceding instance of authentication, the apparatus comprising:

input means (500) for inputting a current presented instance of the password; and

comparison means (501) for performing a comparison operation in which the second field of the current presented instance of the password is compared using data retained since a prior instance of authentication of the password," as

[(Anderson column 3, lines 43 - 47 and Fig 4) shows a password that contains a static "pass phrase" field and a dynamic "seed" field.]

(Anderson column 5, line 35 – column 6 line 49 and Figs 3, 4) shows a re-initialization process that sends two passwords, both containing the same pass phrase. The first password contains a seed that was used in the previous login attempt and the second password contains the new value to be stored in the server. The server then compares the first password to the one stored from a previous login.]

Regarding claim 16:

Anderson discloses “Apparatus according to claim 15, wherein the historic data is a function of a preceding password,” as

[(Anderson column 3, lines 43 - 47 and Fig 4) shows a password that contains a static “pass phrase” field and a dynamic “seed” field.]

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3, 5, 7, 8, 11-14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Yu (WO 00/62456 A2).

Regarding claim 3:

Anderson and Yu disclose “A method according to claim 1, wherein the historic data is a function of an event record of a preceding instance of authentication,” as

[(Anderson column 3, lines 44 - 47 and Fig 4) shows a password that contains a static “pass phrase” field and a dynamic “seed” field.]

(Yu page 3, line 22 – page 5, line 3 and Table 1) shows a dynamic password containing more than one field of data.

Combining these two ideas, we can see that the dynamic field of the password can contain many different types of variables. These different types of variables can represent an event record.]

Anderson and Yu are analogous art because they are from the same field of endeavor of dynamic password generation and encryption.

It would have been obvious to one of ordinary skill in the art at the time of the invention to increase password security and complexity by altering the dynamic portion of data to carry many different data fields, as described in Yu.

Regarding claim 5:

Anderson further discloses "A method according to claim 4, wherein, for the dynamic field, the step of performing a comparison operation comprises" but fails to explicitly disclose "receiving extrinsic data in the form of date and/or time and/or place data and/or internet protocol address of a client machine."

However, Yu discloses "receiving extrinsic data in the form of date and/or time and/or place data and/or internet protocol address of a client machine," as

[(Yu page 3, lines 22 – 30) shows several fields selected for the purpose of creating a dynamic password. Time, place, and IP address are included among these.]

Anderson and Yu are analogous art because they are from the same field of endeavor of dynamic password generation and encryption.

It would have been obvious to one of ordinary skill in the art at the time of the invention to increase password security and complexity by adding extrinsic data to the dynamic field of the password, as described in Yu.

Regarding claim 7:

Anderson and Yu further disclose "A method according to claim 6, wherein the data retained (602) comprises one of the date and the time of receipt of the instance of the current presented instance of the password," as

[(Anderson column 5, line 65 – column 6, line 49) shows the system authenticating the old password and storing the new one on a successful comparison.

(Yu page 3, lines 22 - 30) shows that a dynamic password can include date and time fields.]

Anderson and Yu are analogous art because they are from the same field of endeavor of dynamic password generation and encryption.

It would have been obvious to one of ordinary skill in the art at the time of the invention to increase password security and complexity by adding time and date fields to the dynamic field of the password, as described in Yu.

Regarding claim 8:

Anderson and Yu further disclose "A method according to claim 6, wherein the data retained (602) is derived from the place of receipt of the instance of the current presented instance of the password," as

[(Anderson column 5, line 65 – column 6, line 49) shows the system authenticating the old password and storing the new one on a successful comparison.

(Yu page 3, lines 22 - 30) shows that a dynamic password can include place and location values.]

Anderson and Yu are analogous art because they are from the same field of endeavor of dynamic password generation and encryption.

It would have been obvious to one of ordinary skill in the art at the time of the invention to increase password security and complexity by adding place and/or location values to the dynamic field of the password, as described in Yu.

Regarding claim 11:

Anderson and Yu further disclose "A method according to claim 1, in which the password further has a third field containing pseudo-random data," as

[(Anderson column 3, lines 44 - 47 and Fig 4) shows a password that contains a static "pass phrase" field and a dynamic "seed" field.

(Yu page 3, line 22 – page 5, line 3, Table 1 and Fig 1) shows a dynamic password containing more than one field of data.

(Yu page 5, line 18 – page 6, line 4) shows that a dynamic password can contain a field with semi-random data.]

Anderson and Yu are analogous art because they are from the same field of endeavor of dynamic password generation and encryption.

It would have been obvious to one of ordinary skill in the art at the time of the invention to increase password security and complexity by adding semi-random data to the dynamic field of the password, as described in Yu.

Regarding claim 12:

Anderson further discloses “A method according to claim 11, in which the pseudo-random data is input by the user,” as

[(Anderson column 7, lines 34 - 39) shows that the seed can be generated by the server, the client, or the user.]

Regarding claim 13:

Anderson discloses “A method according to claim 11, in which the data retained is the contents of the third field,” as

[(Anderson column 3, lines 44 - 47 and Fig 4) shows a password that contains a static “pass phrase” field and a dynamic “seed” field.]

(Yu page 3, line 22 – page 5, line 3, Table 1 and Fig 1) shows a dynamic password containing more than one field of data. It would be obvious to store any or all fields from the “seed.”]

Regarding claim 14:

Anderson discloses “A method according to claim 6, comprising retaining the contents of the third field,” as

[(Anderson column 3, lines 44 - 47 and Fig 4) shows a password that contains a static “pass phrase” field and a dynamic “seed” field.

(Yu page 3, line 22 – page 5, line 3, Table 1 and Fig 1) shows a dynamic password containing more than one field of data. It would be obvious to store any or all fields from the “seed.”]

Anderson and Yu are analogous art because they are from the same field of endeavor of dynamic password generation and encryption.

It would have been obvious to one of ordinary skill in the art at the time of the invention to increase password security and complexity by altering the dynamic portion of data to carry many different data fields, as described in Yu, then storing any or all of these fields for future comparison.

Regarding claim 17:

Anderson discloses “when presented with a current presented instance of a password that is presentable in a series of instances and has a first set of fields (201, 203) and has a second field (202), wherein the first set of fields comprises at least one of (a) a static field (201) that does not change upon each instance of the password and (b) a dynamic field (203) that changes with each instance of

the password based upon extrinsic data, and wherein the second field (202) is arranged to contain data that is a function of a preceding instance of authentication, cause the computer to:

perform a comparison operation (605) in which the second field of the current presented instance of the password is compared using data retained since a prior instance of authentication of the password," as

[(Anderson column 3, lines 43 - 47 and Fig 4) shows a password that contains a static "pass phrase" field and a dynamic "seed" field.]

(Anderson column 5, line 35 – column 6 line 49 and Figs 3, 4) shows a re-initialization process that sends two passwords, both containing the same pass phrase. The first password contains a seed that was used in the previous login attempt and the second password contains the new value to be stored in the server. The server then compares the first password to the one stored from a previous login.]

But fails to explicitly disclose "A data carrier having stored thereon instructions and data which, when loaded into the memory (521) of a suitable computer (501)."

However, Yu discloses "A data carrier having stored thereon instructions and data which, when loaded into the memory (521) of a suitable computer (501)," as

[(Yu page 9, lines 14 - 16) shows a magnetic card that has the static “basic ID” and the dynamic “variables” and the equations necessary to calculate the current password.]

Anderson and Yu are analogous art because they are from the same field of endeavor of dynamic password generation and encryption.

It would have been obvious to one of ordinary skill in the art at the time of the invention to increase password security by requiring the use of an external data carrying device as described in Yu.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER B. ARCHER whose telephone number is (571)270-7308. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Pham can be reached on (571)272-3689. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. B. A./
Examiner, Art Unit 4148

/THOMAS PHAM/
Supervisory Patent Examiner, Art Unit 4148